

CLAIMS

WE CLAIMS

1. A method for treating a container for food, comprising circulating chlorine dioxide gas for a time in said container, then removing the chlorine dioxide gas from said container, and reclaiming the chlorine dioxide gas.
2. The method of claim 1 wherein the chlorine dioxide gas is reclaimed by dissolving it in a solvent.
3. The method of claim 1 wherein the chlorine dioxide gas is produced outside said container.
4. The method of claim 1 wherein the chlorine dioxide gas is produced inside said container.
5. The method of claim 4 wherein the chlorine dioxide gas is produced inside said container by providing an aqueous chlorine dioxide solution in the storage container and bubbling a gas through the solution in the storage container.
6. The method of claim 1 wherein the chlorine dioxide gas is removed by flushing said container with a filtered gas.
7. The method of claim 6 wherein the chlorine dioxide gas removed from said container is directed to a chlorine dioxide gas-dissolving tank where the chlorine dioxide gas is dissolved in a solvent.
8. Apparatus for treating a container for food, comprising conduit means for circulating chlorine dioxide gas through said container for a time, means for removing the chlorine dioxide gas from said container, and means for reclaiming the chlorine dioxide gas removed from said container.

9. Apparatus of claim 8 including means for producing the chlorine dioxide gas outside said container.
10. Apparatus of claim 8 including means for producing the chlorine dioxide gas inside said container.
11. Apparatus of claim 10 wherein said means for producing comprises an aqueous chlorine dioxide solution in the storage container and bubbler to bubble a gas through the solution in said container.
12. Apparatus of claim 8 wherein said means for circulating comprises a conduit loop communicated to said container.
13. Apparatus of claim 8 wherein said means for removing said chlorine dioxide gas comprises a flushing gas introduced into said container.
14. Apparatus of claim 8 wherein said means for reclaiming said chlorine dioxide gas comprises a chlorine gas dissolving solvent in a tank.
15. Apparatus of claim 14 including means downstream of said tank for neutralizing any undissolved chlorine gas.